

Designing a Cubesat for Remote Sensing

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Abstract: There are many types of satellites used today for communication, remote sensing, Navigation, and other Military application. Cubesat reduces launch cost mainly in two fundamental ways. They don't weigh that much, which means a rocket doesn't need a lot of fuel to lift them. In most cases, they also share a rocket with a larger satellite, making it possible to get to space on the coattails of the heavier payload. In this project we are trying to design a Cubesat with the main purpose to achieve remote sensing over urban and non-reachable environmental surfaces. In comparison with a standard satellite, a cubesat of multiple numbers can achieve a wide range of information and can help to process in larger area than that of standard satellite. Cubesat can be used to experiment future technology with cost effective method of testing it with a low cost cubesat that is launched into low earth orbit to obtain experimental test results. They have the potential to give huge benefits for space research and interplanetary missions as well.

Keywords: Remote Sensing

V. CONCLUSION

This paper gives us the detailed advantage of the cubesat and its resourceful use in space missions. Further the method of using the cubesat in a grid formation explains that there are more than one way of using this satellites and the future development in technology can bring a diverse variety in the use of cube sat. As mentioned of the cubesat in grid formation with the main communicating cubesat in the centre of the formation and surrounded with the cubesat's equipped with advanced superior sensors that can give us a detailed and accurate information of the targeted area. By using the grid formation method one can use the cubesat's to observe multiple targets and can simultaneously analyze the information obtained. The cubesat for remote sensing give the information about the target's geography, temperature, humidity, altitude, etc. By analyzing the information's obtained the land can be observed and the environment in this land can be calculated without the need for direct observation by the officers.